on the mountain or along the Notch road. Mr. Torrey writes me, however, that at the time of his visit in 1885, he heard the Hermit near the summit, "singing freely."

Mrs. Straw reports them as rather common at certain points lower down the valley.

85. **Merula migratoria.** AMERICAN ROBIN. — Abundant, especially in the valley. I was surprised to observe a good many in the heavy timber along the Notch road, far from clearings. I saw one also at the summit.

86. **Sialia sialis.** BLUEBIRD. — Rather uncommon; observed at the base of the mountain and at Moscow.

THE ALDER FLYCATCHER (*EMPIDONAX TRAILLII ALNORUM*) AS A SUMMER RESIDENT OF EASTERN MASSACHUSETTS.

BY J. A. FARLEY.

CERTAIN facts in the life-history of the Alder Flycatcher contribute to create the general impression that the bird is an exceedingly rare summer resident of eastern Massachusetts. Its chosen haunts are not too often in the eye of the world; it is not a vociferous species; and its manner of securing an existence keeps it for the most part out of view of the casual observer. Furthermore, the species being well known to arrive toward the end of the spring migration, an Alder Flycatcher, appearing late in May in the capacity of a returned summer resident, has doubtless been often mistaken for a migrant still northward bound. *E. t. alnorum* therefore, while always breeding sparingly, is not so rare a summer bird in the eastern part of Massachusetts as it is commonly supposed to be.

The Alder Flycatcher occurs in summer at various localities in Essex and Middlesex counties. I have noted it in the breeding season at Crane Neck Pond in Groveland, in northern Essex County, and so near Boston as Fresh Pond, Cambridge; also in the towns of Wilmington, Lynnfield, and Wakefield. In one locality in Essex County the bird is plainly increasing in numbers.

The Alder Flycatcher arrives in eastern Massachusetts about May 20. By the thirtieth of the month it has always reappeared on its breeding grounds. These are bushy meadows grown (or growing) up more or less thickly with alders. The lower growth in such places consists of wild roses (*Rosa*), sweet gale (*Myrica gale* L.), and other swamp shrubbery, together with the usual mixed meadow herbage. Mingled with the alders will be young swamp maples and birches and oftentimes scattering white cedars. The whole forms a thick, at times almost choked, expanse of meadow growth. The wild roses in which the Flycatcher is so fond of nesting seem to be almost as much an essential in its summer home as the alders themselves. The bird builds its nest year after year in the same favorite spot which may be of quite limited area. In a small meadow in the town of Lynnfield, where five years elapsed between the taking of two nests (June 16, 1895, and June 27, 1900), I recall that the second nest was placed in almost identically the same spot as the first. Two other nests (of other seasons) I also found in the same area, which was less than an acre in extent.

The erroneous idea[1] that the Alder Flycatcher is a very shy bird appears to obtain. This is due to the fact that its feeding-habits rather than any inherent shyness cause it to hug closely its favorite alders and other coverts. Besides keeping quite habitually within copse or thicket, with the general scope of its activity circumscribed by at least their outer fringes, it does not as a rule perch or fly high. The thick foliage of June and July aid materially in its concealment, so that it is not always easy to get even a momentary glimpse of the bird which may be calling and flying about within a few yards. The exceptions to the general rule that the Alder Flycatcher is *par excellence* a bird of copse and undergrowth are the little creature's infrequent short flights out into the open, and its brief visits to some favorite vantage-point above the line of foliage, for the deliverance of its harsh cry. But the emphatic preachment of the small protagonist of the alders is quite as apt to be heard while the performer is perched unseen

[1] This in spite of the fact that long ago the species was reported by Mr. Brewster to be "retiring but not shy." (Hist. N. A. Birds, 1874, p. 371.)

within his thicket and but a few feet from the ground. It should be further noted that the Alder Flycatcher is most in evidence during the days following its arrival from the South, and before the breeding season is well advanced. In May and June one may be now and then seen flying about freely from tree-top to tree-top in its home meadow. The Alder Flycatcher in eastern Massachusetts is no shyer than most other small birds. It is scarcely shyer than the Least Flycatcher, although a more restless bird than its orchard-loving cousin. The Alder Flycatcher does not hesitate to fly about from one bosky clump to another in its meadow. But when arrived at the concealing growth, it may remain a long time therein before venturing forth again.

The familiar cry, or song, of the Alder Flycatcher is usually described as having two or more syllables; and this indeed is the effect produced upon the ear of the listener at a distance of fifty yards, or even less, from the bird. But, as is the case with some other bird utterances, a wrong apprehension is gained of the peculiar note, unless it be heard close at hand. As ordinarily heard it may be written *rhi-bhee*, or even *rhi-bhea*, the second syllable being much emphasized. But when the bird calls within a few feet of the listener, this song is found in reality to consist of but *one* harsh explosive syllable. Of an indescribable *timbre*, it may be written *r-r-rhee* (or perhaps *r-r-rhea*, but with the final *a* in this case very slightly touched upon).

The minor notes of the Alder Flycatcher, like its harsh cry, are perfectly characteristic and unlike the notes of any other bird. They are of two sorts, the common low *pip* or *pep*, which to some ears may more resemble *peep*, and the softly whistled whisper (or whispered whistle), *pip-whee* or *pip-whing*. There is an interval between the two syllables of this soft song, and the last is accented. Its peculiar softness may be perhaps better expressed by *wheeo* rather than by *whee* or even *whing*. Although among the softest of bird utterances this song, when closely analyzed, will be found to be essentially a much subdued variant of the loud, harsh *r-r-rhee*, being similar in kind but exceedingly less in degree. Both the *pips* (*peps*) and the *pip-*(*pep-*)*whees* are sometimes uttered a half-dozen or more times in rapid succession. When quarreling with another bird, the Alder Flycatcher pro-

duces excited fighting notes which resemble the corresponding utterances of the Least Flycatcher. The *pips* are then louder than usual and somewhat approach in tone the *whits* of the Least.

In its summer home the Alder Flycatcher is one of the quietest of birds. After a long interval of silence, during which it has uttered not a sound of any sort, the bird may *pep* freely for a little while, interspersing the whistled *pep-whees* or the *whees* (*wheeos*) alone without the introductory *pep*. But the intervals are long between such spells of vociferousness.

The soft *pep-whee* (*whing*) must be sharply listened for by the unaccustomed ear. It is a faint little cry that rarely rises above the gentle rustle of the alder and maple leaves as they are stirred by the June zephyrs.

With reference to its manner of nesting the Alder Flycatcher, in eastern Massachusetts at least, might well be given the additional name of Bush Flycatcher. So far as I have observed, it nests invariably in a bush, selecting most often a wild rose, or clump of rose shoots or sprays — usually *Rosa carolina* L.[1] The nest is often overshadowed by the alders which are scattered here and there in clumps in the bushy meadow. But it is as likely to be placed in unshaded shrubbery in the full glare of the sun. When in the open, it is more or less hid, however, by the mingled mass of wild roses, sweet gale, and other bushes rising breast-high all about it. It is often in the thickest jungle of such growth where tall, waving ferns vie in height with the predominating tangle of rose bushes that the Alder Flycatcher hides away its nest.

The height of the nest from the ground is from two to four feet. It is placed rather loosely, at times even flimsily, in an upright crotch or rather fork, or else between independent twigs that furnish a similar support. In either case the nest is suspended in a characteristic and peculiar way. I have never seen it set snugly down into a crotch after the manner of the Least Flycatcher. It is, instead, supported between twigs or prongs. It gets its chief support, as a rule, from two main shoots which

[1] I recall finding a nest once in a small shrub of meadow sweet (*Spiraea salicifolia* L.).

often grow from the ground independently of each other, but which will be sometimes members of one bush, forming in this case a long crotch or fork. When the slender shoots or sprays are distinct, springing separately from the ground, but growing close together at different inclinations, they furnish at best but an indifferent support to the nest. The general effect of the nest of the Alder Flycatcher thus placed is that of a somewhat loose, somewhat unfinished, not very securely fastened structure. The enlisting of separate, independent sprays in support of the nest is a marked feature of the Alder Flycatcher's nest architecture. One spray is usually superfluous, being only slightly tied to the nest and lending a support which is more apparent than real. But this feature seems to be an essential in the bird's architectural scheme and is almost always present.

The nest itself is in its body a fairly compact but not very neat structure. It is composed almost wholly of fine dried grasses with lining of the same material but of a finer (sometimes of the finest) sort. Some nests have in addition to the grasses fibrous strips of *Asclepias* woven around and through their structure. In one case I noticed on the outside of a nest some weather-worn material from a tent caterpillar's web. The outside of the nest always shows more or less loose odds and ends in the shape of long, narrow grasses and *Asclepias* strips 'stringing' down below or projecting in various directions. This unfinished appearance of the lower outside of the nest, although varying in degree in different examples, invariably characterizes the Alder Flycatcher's style of architecture. Together with the peculiar manner of support of the nest, it so strongly characterizes the structure that he who runs may read. The nest is unmistakable, even without eggs, and whether old or new. I have noted two types of nests — one, large, round, and thick-walled with diameter great in proportion to depth but still not a shallow structure; the other, smaller and shallower, inclining more to the sparrow-style, being of coarser construction within and without.

A beautiful nest which I found in 1895 in Essex County merits description because, in addition to being the handsomest structure of the Alder Flycatcher that I have seen, it is typical (although in a somewhat exaggerated way) of the general architecture of the

species. The nest was three and one-half feet from the ground in a clump of the swamp rose (*Rosa carolina* L.), being one foot below the top of the bush. The nest is large, representing the extreme in size. Its inside depth is two and one-eighth inches; outside depth, three inches; outside diameter, three and three-eighths inches; inside diameter, one-half inch less. It is composed of fine grasses and strips of *Asclepias*, the latter woven into the body of the structure as well as wound about the outside and over the rim. It is deeply-cupped and thickly-walled, with rim slightly curving over and in on one side. The lining is composed of the finest of hair-like, dried, yellow grasses. A pretty effect is obtained by the use of a very delicate grass which, projecting above the rim, shows the finest of tassels.

The nest is mainly supported by a single long fork in which it is suspended basket-like. An additional slight but practically fictitious support is lent by a third slender shoot springing independently from the ground, the nest being tied in the flimsiest manner possible to a very small sprig of the same. The long fork in which the nest hangs is formed by the main stem of the rose bush and a long slender upright branch springing therefrom at three feet from the ground. There is a space of two and one-half inches between the parting of this fork and the lowest outside point of the nest hanging therein above. A very fine twig from the long, slender branch runs directly up beneath the nest and helps to horse it up. The nest is strongly tied on one side to the main stem and two twigs springing therefrom. On the opposite side the long slender branch and one twig supply two additional points of support, there being in all, therefore, five main points of contact from which the structure hangs. A basket-like effect is obtained and this is enhanced by the profuse use of *Asclepias* on the outside of the nest, this being in fact the chief material used in its construction. This nest has in common with all others that I have seen the usual, characteristic, loose, unfinished, even ragged, appearance outside and below. But the long grasses and especially the fibrous strips of *Asclepias* hang or string down in the present case in unusual quantity and length. Much of this reaches down six inches below the nest. Some of it extends down for one foot. A studied air of disarrangement,

of negligence, of elegant confusion, is thus secured. The decorative effect is heightened by the silvery *Asclepias*, which, in addition to entering so largely into the body of the nest, causing it to shine flax-like, streams down and out therefrom in what might be termed a fibrous cascade. In greatest possible contrast to the disarranged, silvery-gray exterior is the round, deeply-hollowed interior with its exquisite yellow lining of finest grass. The excessive use of *Asclepias* in this nest is exceptional. In another respect the nest is scarcely typical, as it is more firmly held in its bush than the average structure of the Alder Flycatcher.

The looser style of suspension is well shown by another nest in my collection. This is characteristically held up by two tall, slender, entirely distinct rose shoots which grew in a thick jungle of wild roses and sweet gale. Each of the shoots is divided, the larger into two twigs and these in their turn into two smaller twigs which join in partially supporting the nest. The other main, separate shoot supports one side of the structure only with a long, frail, slender spray, which, as usual, subdivides at the nest into several small twigs, the whole taken together giving but a slight support to the grass basket suspended between them. I watched these tall, slender, swamp rose sprouts as they blew over in their clump, bending under the gusts of a high June south-west wind as it swept across a broad meadow. The nest-sprays bent over at an angle of at least forty-five degrees, but were stiffened by the general mass of surrounding growth, so that the nest hung safely in its flimsy fastening and the eggs remained within their shallow cup.

The eggs of the Alder Flycatcher are usually of a creamy white (less often of a dead white), with markings of different shades of brown, these being chiefly at the large end and often forming a broken ring. The markings are generally of a pale, reddish brown, approaching flesh-color if paler than usual, and verging on yellowish if running to the darker extreme. The markings are in spots (often very fine) and small blotches. A few minute dots of a very dark brown, almost black in fact, which have no apparent relation to the general color-scheme, also appear. The eggs are often beautiful objects, especially when the brown of the

markings approaches yellowish and lilac. With this shade appears a ground of creamy pink. Sets of eggs collected in the same locality show considerable variation, and the eggs of a set often differ much among themselves. A peculiar set of three in my collection, taken July 3, 1900, represents the minimum in measurements, and may be described as follows: No. 1 is of a dull dead white and is nearly immaculate, having only a very few scattered, minute, dark brown dots at the larger end; No. 2 has at the larger end, in addition to the very fine dusting of dark dots, a single abnormally large blotch of pale brown, with overlaying fine tracery and dots of a very dark brown; No. 3 is of a creamy ground color and is beautifully marked after the typical style with a fairly complete ring of pale brown blotches having darker centres, and with dark brown (almost black) round dots interspersed among the blotches, a rich effect being thus secured. The eggs of this set average .67 × .52. But the average size of eggs of *alnorum* appears to be about .71 × .55.

The Alder Flycatcher lays sets of three or four eggs, four being the commoner number. It completes its nest and begins laying about the middle of June. But sometimes it will not begin laying until a week later. I have taken very slightly incubated eggs on June 18, and fresh eggs as late as July 3. But this latter date is exceptional. By the middle of July or earlier the young flycatchers are out of the nest.

In the matter of its behaviour at the nest the Alder Flycatcher, in contrast to its general habits, may be fairly considered shy. It is not a close sitter. I have tried repeatedly to catch the female on her eggs but never but once succeeded in so doing. In this exceptional case the bird undoubtedly trusted to the effective concealment of the nest by the very thick clump of wild roses in which it was placed. I stood for several seconds beside this unseen nest before the bird flew. After being flushed the female flycatcher is chary about showing herself in the neighborhood of the nest. So, too, the male. The low *pep* of protest somewhere near will be often the only evidence of the Flycatchers' connection with their nest.

Considerable patience has frequently to be exercised if one hides and awaits the return of the female. She may return within five

or ten minutes or delay for a half-hour. When finally appearing, whether soon or late, she does not indulge in any preliminary hopping or perching in near-by bushes or in the nest-bush itself, but flies straight to the nest and goes on in a twinkling. She often flies through the shrubbery unseen, appearing suddenly and unexpectedly at the nest, and going on the eggs like a flash. But she will frequently leave the eggs again after remaining on but a minute or two, returning after a brief interval for another short stay, and so continuing restless and nervous as long as the intruder remains in the neighborhood.

ON A COLLECTION OF BIRDS MADE BY W. W. BROWN, JR., AT DAVID AND DIVALA, CHIRIQUI.

BY OUTRAM BANGS.

MR. W. W. BROWN, JR., has lately sent to my brother and me 1183 bird skins, the result of about 58 days collecting during the whole of the month of November and parts of October and December, 1900, at David and Divala, two towns, about thirty miles apart, situated in the heavily forested lowlands of Chiriqui. The birds were all taken in the cool tropical forest or on the plantations at about 200 feet above sea level. This splendid collection contains six forms that appear to be new, and some of the other birds belong to species exceedingly rare or altogether wanting in American Museums, so that it seems worth while to publish the following complete list of the lot.

Though he was entirely without assistance, Mr. Brown sent home, beside this large collection of birds, many mammals, and the result shows with what energy he worked in the unhealthy, tropical climate of this fever-stricken region. At David and Divala, Mr. Brown tells me, there is a great difference between the temperatures in the daytime and at night. The days are excessively hot and the nights cool. In the deep forest, however, under the shade of the red rubber tree and the gigantic Spanish